

Camp Bondsteel,
Kosovo.



55th Signal Company (Tyler Long)

ADAPTIVE ENEMIES

Achieving Victory by Avoiding Defeat

By ROBERT H. SCALES, JR.

Once the dogs of war are unleashed and the shooting starts, conflicts follow unpredictable courses. Clausewitz warned that wars are contests between two active, willing enemies, both of whom expect to win. Once begun, war—with its precise planning and cerebral doctrine—quickly devolves into a series of stratagems and counter stratagems as each side seeks to retain advantages long enough to achieve a decisive end by collapsing an enemy's will to resist.¹

Despite its video game image, the NATO campaign against Serbia was no exception to the Clausewitzian construct. Belgrade sought to overcome a tremendous material and technological disadvantage by capitalizing on its strengths: the ability to gain operational objectives quickly and then disperse to avoid the inevitable aerial assault. The Serbs thought that patience, tenacity, guile, and ground forces sequestered throughout

the countryside would provide an interval to outwait the resolve of the Alliance. The political will of NATO proved stronger. But skill and perseverance on the part of the Serbian army in the face of a thousand aircraft with precision guided weapons is a compelling example of how an adaptive enemy can foil the best laid plans of a superior force by capitalizing on its own inherent strengths while minimizing those of an enemy.

Over the last fifty years Western militaries, particularly the U.S. Armed Forces, have been remarkably consistent in how they fight. They have inherited an extraordinary ability to translate technological innovation, industrial base capacity, and national treasure into battlefield advantages as a result of enormous Cold War outlays. However, in an era of limited war, the commitment to limited ends demands the use of limited means. Thus the lives of soldiers have become even more precious and there is a growing impetus to develop a method of warfare that will replace manpower expenditures with an ever multiplying application of firepower.

Major General Robert H. Scales, Jr., USA, is the 44th Commandant of the U.S. Army War College and author of *Firepower in Limited War*.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2000		2. REPORT TYPE		3. DATES COVERED 00-00-1999 to 00-00-2000	
4. TITLE AND SUBTITLE Adaptive Enemies. Achieving Victory by Avoiding Defeat				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National Defense University, 260 Fifth Ave SW, Fort Lesley J McNair, Washington, DC, 20319				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 8	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

B-29 mission in
Korea, 1951.



U.S. analysts have missed much of the discourse among military thinkers outside the West

But as Kosovo proved, potential enemies are watching. They realize the preoccupation in the West with firepower. Therefore, we should not be surprised to eventually encounter an enemy who has learned how to nullify the advantages of firepower. We have been slow to perceive the growing effectiveness of an enemy partly because of a

characteristic arrogance that presumes that, to be a threat, it must pose a symmetrical challenge or mimic the Western way of war. As a result,

the emerging ability of non-Western forces to counter firepower-centered warfare has been hidden in the shadows of unfamiliar military cultures. U.S. analysts have missed much of the discourse and experimentation among military thinkers outside the West, partly because of the cultural divide between advanced industrial democracies and the rest of the world.

World War II

Serbia was not the first power to use adaptive strategies against the Western way of war. Japan demonstrated its analytical ability to survive firepower-intensive American attacks during the closing months of World War II. In 1943–44 the United States won a series of quick and decisive victories using the mobility and firepower of its amphibious forces. But the Japanese carefully observed this method of attack and by the end of 1944 had entirely revamped their defensive plans for the islands guarding the approaches to their homeland.

On Okinawa the Japanese troops abandoned the failed doctrine of beach defense and buried themselves in a vast array of pillboxes, switch lines, and deep bunkers to carry out an extended defensive scheme centered in southern Okinawa. They recognized that they could not match American firepower and maximized what firepower they had, using mortars and artillery with enough deadly effect to not completely cede the advantage to U.S. forces. Fighting their way through deep defensive lines, American troops eventually took the island and destroyed the Japanese Tenth Army—some 70,000 enemy soldiers and an equal number of civilians killed. But the U.S. casualty list was horrendous: 65,631 killed or wounded.

The Chinese Civil War

Another effort to redefine and codify an Eastern approach to defeating the Western way of war began in the mountain fastness of Manchuria immediately after World War II. Mao Tse-Tung and his marshals adapted doctrine from their wartime guerrilla campaigns to fit a conventional war against an enemy superior in technology and matériel. Mao perfected his new way of war against the Nationalists between 1946 and 1949. His simple concepts centered on three tenets, the most important of which was area control. To succeed, Mao's army first needed to survive in the midst of a larger, better-equipped enemy.² He divided his troops into small units and scattered them. Maintaining cohesion thus remained his greatest challenge.

Once his own forces were supportable and stable, Mao applied the second tenet—to isolate and compartmentalize the Nationalists. The challenge of this phase was to leverage control of the countryside until the enemy retreated into urban areas and along major lines of communications.³ The final act of the campaign called for finding the enemy's weakest points and collecting and massing overwhelming force against each sequentially, similar to taking apart a strand of pearls one piece at a time. Mao's new style of conventional war, though effective, demanded extraordinary discipline and patience under extreme hardship. It also sought quick transition from an area control force to one capable of fighting a war of movement.

Stalemate in Korea

Within a year of the Chinese Civil War, America severely tested Mao's methods in Korea. Initially the People's Liberation Army (PLA) badly misjudged the effects of American artillery and

Artillery support,
Korea.



U.S. Army

tactical airpower. Pushed quickly into maneuver warfare, the Chinese massed in the open, often in daylight, to expand their control over the northern Korean peninsula. They extended their narrow lines of communications farther down the mountainous spine of Korea while advancing. But they soon found their logistic support exposed to American airpower and paid a horrid price for their haste. The Spring 1951 offensive mounted by the Chinese sputtered to a halt as U.S. artillery and aerial firepower slaughtered PLA soldiers in masses and air interdiction cut their lines of supply and forced a retreat back across the Han.

Brutal experiences led to sober lessons relearned from the civil war. The Chinese quickly adjusted to a new situation. Over the following two years their attacks were limited and controlled. The high command learned to hold most key logistic facilities north of the Yalu River, out of reach of U.S. air strikes. South of the river they dispersed and hid, massing only to launch attacks. Soldiers moved at night and chiseled their front lines of resistance into granite mountains. American casualties mounted while the Chinese stabilized their own losses at a rate acceptable to Beijing. Many more Americans died during the stability phase than in earlier days of fluid warfare. What was an acceptable human toll to China was unacceptable to the United States. The result was operational and strategic stalemate. But to the Chinese, stalemate equaled victory.

The Vietnam Experience

Over the next two decades the Vietnamese borrowed from the Chinese experience and found creative ways to lessen the killing effect of firepower, first against the French and then the Americans. They also proved skilled in adapting to the new challenges posed by their Western enemies. The Viet Minh based their tactical and operational approach on Mao's unconventional methods. Their conduct of the battle was remarkably reminiscent of siege operations conducted by the PLA during the civil war. In both cases the secret of success was dispersion and preparation of the battlefield. The Viet Minh remained scattered in small units to offer less detectable and less lucrative targets and to allow their troops to live off the land. Fewer supply lines and logistic sites offered even fewer opportunities for interdiction fires.

To win, the Chinese, and eventually the Viet Minh, needed to attack. That demanded the ability to mass temporarily. The Viet Minh had to exercise great care in massing under the enemy umbrella of protective firepower. Superior intelligence indicated the right time and place. The ability to collect and move tens of thousands of soldiers at the right moment allowed attacking forces to collapse French defenses before firepower could regain the advantage. This capacity to "maneuver under fire," perfected against the Nationalists and the French, reached new levels

Loading A-10A,
Desert Storm.



DOD (Tramue Prentiss)

of refinement during the second Indochina War against the United States.

General Giap quickly accommodated his strategic plans to the new realities of American firepower. The North Vietnamese relearned the importance of dispersion and patience. They re-distributed their forces to keep their most vulnerable units outside the range of American artillery while moving their logistic system away from battle areas into sanctuaries relatively safe from aerial detection and strikes. Thus they dusted off and applied many of the same methods that had proven useful in previous Asian wars against Western style armies.

Afghanistan

Half a decade later, and half a continent away in Afghanistan, the Soviets learned the same harsh firsthand lessons of overconfidence when first world militaries confront third world forces which have the will, tenacity, and skill to remain effective despite firepower inferiority. Year after year, the Soviets arrayed themselves for conventional combat and pushed methodically up the Panjir Valley only to be expelled a few months later by a seemingly endless and psychologically debilitating series of methodical and well-placed ambushes and skirmishes. Borrowing a page from the American textbook in Vietnam, the Soviets tried to exploit the

firepower, speed, and intimidation of armed helicopters. They employed them principally as convoy escorts and to provide fire support. At times, Hind helicopters proved enormously lethal, particularly early on when the Mujahideen were psychologically unprepared. But the guerrillas eventually turned back to the Vietnam experience, employing heavy antiaircraft machine guns and then Stinger shoulder-fired missiles to shoot the gunships down in increasing numbers. Military frustration and defeat in Afghanistan presaged the collapse of the Soviet Union.

Israel and the Middle East

Beginning in 1982, after nearly three decades of failure in open warfare, an alliance of Arab state and non-state actors pushed Israeli mechanized forces out of Beirut. Back streets, tall buildings, and other urban clutter provided the Arabs just enough respite from intensive firepower to wear away Israeli morale in the field and at home. Unable to bring superior maneuverability and shock effect fully to bear, the Israelis paused just short of their operational objectives. Excessive casualties and the public images of bloody excesses on both sides eventually resulted in Israeli withdrawal. This success provided Israel's enemies with a promising new method to offset its superiority in open mechanized combat. Now a spectrum of low-tech threats that run the gamut from weapons of mass

destruction delivered by crude ballistic missiles, to acts of terrorism, to children throwing rocks at soldiers confront an increasingly frustrated Israeli military and public.

An irony of the recent wars in the Middle East is that Western style militaries have had great success against non-Western enemies who mimic their own firepower doctrines. The Gulf War is the most recent example of failed efforts

by Arab states stretching back to 1948. In 1973 Arab armies enjoyed some measure of success applying Western methods, but that was as much a result of Israeli overconfidence as of limited Arab objectives.

The Gulf War

Despite extraordinary incompetence on the part of the Iraqi leadership, the enemy displayed considerable capacity to adapt on the battlefield during Operation Desert Storm. As the American air campaign began to focus on destroying Iraqi ground forces in the Kuwait theater during early February, the enemy quickly adapted. By constructing berms around tanks and scattering them across the desert, they ensured that aircraft dropping precision guided bombs could at best destroy only a single vehicle per pass. Burning tires next to operational vehicles spoofed attackers into missing

real targets. Moreover, effective antiaircraft fire kept many coalition planes too high to do substantial damage.

The best trained Iraqi units endured weeks of allied air bombardment with unbroken will and their combat capability intact. The most impressive indication of the Iraqi ability to adapt came in the operational movement of a substantial portion of the Republican Guard during the first hours of Desert Storm. Elements of two divisions shifted from a southeastern defensive orientation to defensive positions that faced southwest along Wadi al-Batin. There the Tawakalna Division and the 50th and 37th Armored Brigades would be destroyed by VII Corps.⁴ Nevertheless, sacrifices by these enemy units allowed the rest of the Republican Guard to withdraw. Significantly, Iraqi forces escaped through terrain and under weather conditions that were suited to their interdiction and despite overwhelming coalition airpower.

NATO and Kosovo

Placed in historical context, the Serbian response to the NATO onslaught is simply another data point on a continuum of progressive, predictable adaptations by technologically dispossessed forces willing to challenge Western militaries with superior precision firepower. Like their Asian fellow travelers, the Serbs sought victory by avoiding defeat. In a similar fashion, they conceded the vertical dimension of the battlespace to NATO. They were content to shoot down a few aircraft using ground mounted guns and missiles.

Coordinating airstrikes,
Deliberate Force.



DOD (Dave Trawick)

This hope was underscored by an expectation that a few dead or captured Allied airmen would gradually degrade NATO resolve. Even if a shootdown was impossible, the Serbs sought to keep their anti-aircraft assets robust because ground targets would be difficult to spot from high altitudes.

The surest way to avoid defeat was keeping the army in the field viable—both as a defiant symbol of national resolve and legitimate Serbian guarantor of sovereignty over occupied territory. To maintain an effective army in being, the Serbs likewise depended on precedents. Units quickly went to ground and dispersed widely. They rapidly computed the pace at which the Allies could find, target, and strike uncovered assets and then devised ways to relocate mobile targets inside the Allied sensor-to-shooter envelope. They replicated camouflage, decoys, and spoofing techniques proven effective by Asian armies. As the Allies became proficient at spotting troops, Serbs sought greater dispersal and went deeper to ground.

Toward the end, the coalition gained a significant airpower advantage with the appearance of an infant ground presence in the form of the Kosovo Liberation Army (KLA). This force was not very effective

in open combat against the better armed Serbs, but the presence of large scale KLA units among them forced the Serbs to come out of protective cover and mass. The results were remarkably consistent with past experiences against China and North Vietnam. Troops moving, massed, and in the open present the most lucrative targets from the air. Yet the Serb forces were never severely damaged because they were too large and protected to be erased by aircraft. Since total destruction was not feasible, as in all battles of attrition the contest in Kosovo soon devolved into a test of time and will. Victory would go to the side that could endure the longest without their will collapsing. Once it became evident to Milosevitch that NATO resolve would not be broken before a threatened ground assault could materialize, he ceded Kosovo to ensure his own political survival.

Implications for the Future

Kosovo reinforces the conclusion that non-Western militaries are increasingly internalizing the lessons of wars against technologically superior enemies. Recent works on the operational and tactical problems of fighting Western style militaries suggest clear warnings. First, non-Western enemies understand Western military vulnerabilities: aversion to casualties and collateral

Remains of the day in Klokot, Kosovo.



55th Signal Company (Tyler Long)



Effects of anti-tank mine near Kaminca, Kosovo.

55th Signal Company (Cory Montgomery)

damage, sensitivity to domestic and world opinion, and lack of commitment to conflicts measured in years rather than months. They also perceive that Americans, in particular, retain a style of war focused on the single offensive dimension of precision strike. Moreover, they are already considering how to target Western vulnerabilities while capitalizing on their intrinsic advantages: time, will, and the inherent power of the defensive. Borrowing from Mao and Giap, future enemies have learned the value of time and patience. From their perspective, swift success is not essential to victory.

Future enemies have also realized the advantage of interfering with an intruder's intention to end a conflict quickly at minimum cost. Moreover, non-Western armies have learned to limit

the effect and duration of air campaigns by dispersing not only their forces, but telecommunications, logistics, and transportation infrastructures. They also understand that so-

phisticated air defenses, whose effectiveness depends on airfields, surface-to-air missile sites, and vulnerable command and control nodes, have become liabilities more than assets.

Once the ground conflict begins, enemies understand they must use superior mass to offset the lethal firepower and precision technology of Western armies. They will capitalize on the positional advantages of being on the defensive in or near their territory. As they gain confidence, they will search for opportunities to mass sufficient force to achieve local successes. As in the air campaign, they will seek to frustrate Western ground forces with just enough modern weaponry to extend the campaign indefinitely. A few precision cruise missiles against major logistic bases will add to the casualty rates that Western militaries must explain to their citizens. The object will not be decisive victory but stalemate. A prolonged stalemate will erode Western political support for the conflict.

Early Signals of Change

As non-Western militaries develop concepts for defeating the American firepower-centered method of war, the character and composition of their forces is changing. The Cold War impulse to clone Western force structures is disappearing. Foreign militaries are taking on their own identities. The mountains of metal, consisting of expensive yet often second-rate land, sea, and air machines that serve as lucrative targets are rapidly vanishing. In particular, non-Western armies are becoming lighter. The need to survive and remain effective against the threat of overwhelming killing power is forcing them to disperse, hide, or eliminate the vulnerable logistics, transportation,

and telecommunications facilities that now characterize the Western way of war.

Evidence of this trend can be found on the shopping lists of emerging militaries. Instead of sophisticated aircraft and blue water navies, most are pursuing cheap weapons of mass destruction and the methods of delivering them. Sea and land mines as well as distributed air defense weapons suggest that the intent of these militaries is to use such weapons to keep potential enemies at bay. Most expenditures and attention go to land forces because armies provide political legitimacy in nondemocratic states. They are also useful instruments for waging regional wars of aggression and sure means for suppressing internal dissent and thwarting troublesome outsiders.

Information Age Neutrality

Too many in the West think they can confront a major competitor by exploring information age technologies to develop ever more effective means of finding an enemy and destroying it from a distance. This premise is troubling. The most obvious concern is that the information revolution will be neutral or even favor the competition because they can tailor new technologies to their style of war without becoming information-dependent. Also, the amount of information is drowning commanders, staffs, and intelligence organizations, a byproduct of the information age that has not been resolved. It is clear that information technology will not simplify decision-making but make it more complex. Future enemies, however, will require much less information to strike effectively, particularly because their aim is not decisive victory. They will be, moreover, less dependent on the microchip. A thinking enemy will quickly realize that our intensive reliance on information age technologies becomes a weakness that can turn into an asymmetric target.

Military literature published abroad, particularly in Asia, reveals that many armies already place extraordinary emphasis on information operations and warfare. At present American analysts take comfort in the observation that few have made serious investments in information warfare or precision systems similar to the West. They fail to see that Asian militaries understand that information technology will also favor their style of warfare. In particular, the Internet and wireless non-nodal communication will allow dispersed armies to mass rapidly. As information becomes more secure and information centers are more distributed and less vulnerable, enemies will wield more flexible land forces. Moreover, they can be

information technology will not simplify decisionmaking but make it more complex

F-15 at RAF Lakenheath during Deliberate Force.



DOD (Paul Caron)

organized into smaller and less detectable increments. Ironically, information technology may offer an enemy the solution to two vexing problems. First, both cellular technology and the Internet may facilitate a concert of action for long periods among widely separated units. Second, these technologies will allow them to orchestrate the rapid massing of dispersed units when opportunities arise to transition to the offensive.

The result may be a foot race that either side could win. As technologies are developed to find an enemy, that enemy will in turn develop technologies to hide. The prospect becomes more sobering as one considers that commercial sources provide competitors with the means as Western research perfects non-nodal, distributed, and net-centric information technologies for customers in every part of the world. Moreover, potential enemies do not have to spend a dime to develop such systems. And it should be remembered that they have a very different strategy in mind for the next war. They need only create a stalemate and inflict sufficient casualties to raise political difficulties for leaders who decided to intervene, as Neville Chamberlain remarked, in “a quarrel in a far away country between people of whom we know nothing.”

Defeating Adaptive Enemies

Clausewitz offers a harsh dictum:

War, however, is not the action of a living force upon a lifeless mass (total nonresistance would be no war at all) but always the collision of two living forces. The ultimate aim of waging war . . . must be taken as applying to both sides. Once again, there is interaction. So long as I have not overthrown my opponent I am bound to fear he may overthrow me. Thus, I am not in control: he dictates to me as much as I dictate to him.⁵

It is this point that Western—particularly, American—militaries are in danger of forgetting. Future enemies will have carefully considered how to attack our weaknesses.

To be sure, firepower can be paralytic. But such effects are fleeting. Armies have shown time and again that they can become inured to the effects of firepower and can learn creative ways to lessen them. Add the ability of non-Western armies to utilize the advantages of time, mass, will, and the defensive, and the single American advantage of superior killing power becomes less persuasive as an instrument of war.

The corollary to Newton’s fundamental law of physics resounds with a sense of urgency: every technical or tactical innovation that provides a dominant military advantage eventually yields to a countervailing response that shifts the advantage to the opposing force. American dominance in firepower and attrition warfare has been on display for five decades. Challenges that will seek to capitalize on a preoccupation with precision strike must be anticipated. Balance must be restored in our method of war. Our future capabilities must include a 21st century sword with two equally compelling edges: precision maneuver and precision firepower. Without both applied in harmony, conflicts might devolve into massive wars of attrition. Let us begin now to take on the challenge of an adaptive enemy and to build a balanced force to defeat it. **JFQ**

NOTES

¹ This thesis originally appeared in Robert H. Scales, Jr., “Adapting Enemies: Dealing with the Strategic Threat after 2010,” *Strategic Review*, vol. 27, no. 1 (Winter 1999), pp. 5–14. Portions of the above articles are reproduced here with permission.

² Mao Tse-Tung, *Selected Works of Mao Tse-Tung*, Vols. I and III (Beijing: Foreign Language Press, 1967); William H. Whitson, *The Chinese High Command: A History of Communist Politics, 1927–1971* (New York: Praeger, 1973).

³ Frederick Fu Liu, *A Military History of Modern China: 1924–1949* (Princeton: Princeton University Press, 1956).

⁴ Robert H. Scales, Jr., *Certain Victory: The U.S. Army in the Gulf War* (Washington: Office of the Chief of Staff, U.S. Army, 1993).

⁵ Carl von Clausewitz, *On War*, edited and translated by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), p. 77.